



Southern Giant Petrel (*Macronectes giganteus*)

The Antarctic Site Inventory

2002
Annual Report
from
Oceanites, Inc.

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Onward, Upward!

I'm asked frequently asked: "Why should I contribute to Oceanites and support the work of the Antarctic Site Inventory?"

Most importantly, because no other wildlife or environmental non-governmental organization — US-based or international — directly supports field studies adding to our collective knowledge of Antarctica, and to the successful, long-term implementation of the Antarctic Environmental Protocol.

Industry-collected data and site-descriptions will be cornerstones for detecting environmental changes and, then, determining why changes may be occurring and whether they're natural variations or, possibly, caused by human activities. There is little doubt Antarctic Treaty countries will rely on the Inventory to ensure that the Seventh Continent remains a bastion of science, peace, and environmental protection.

But the Inventory's success — in the field and within the Antarctic Treaty system — belies a crucial reality: That our painstaking work doesn't translate, necessarily, into immediate results. Consequently, maintaining support for the Inventory's assessment and monitoring effort is — and will continue to be — extraordinarily difficult.

Our 2001-02 field season was very successful, as we added 10 new sites to our growing database. In eight seasons, we've now made 426 visits to 76 Antarctic Peninsula locations. No one knows this frequently visited, penguin-laden swath of Antarctica better than we do.

During the summer, the US Environmental Protection Agency commissioned a revision to Oceanites' seminal *Site Compendium of Antarctic Peninsula Visitor Sites*. The *Compendium* was first published in 1997 and became "The Bible" for all concerned with direct and cumulative impacts in the Peninsula, and how such impacts might be minimized, if not avoided altogether. This cohort includes a large, international community of diplomats, scientists, environmentalists, expedition tour operators, and expedition leaders and staff.

In September, I renewed my direct participation at Antarctic Treaty meetings, as an advisor to the US delegation attending the 25th Antarctic Treaty Consultative Meeting in Warsaw. The UK and US governments submitted an information paper describing the achievements of the Antarctic Site Inventory over eight field seasons, and the project garnered much favorable comment, both in public sessions and in the Meeting's Final Report.

Our ninth field season begins in November 2002 and, once again, we're thrilled to be working with Lindblad Expeditions and *MV Endeavour* to accomplish our regular censusing and data-collecting.

Lots accomplished, so far. Much more to be done.

I greatly appreciate the attention you've given and the donations you've made to Oceanites, which keep Inventory data flowing, and trust that you'll continue helping us conserve Antarctica for future generations.

Ron Naveen

President, Oceanites, Inc.

Principal Investigator, Antarctic Site Inventory

November 1, 2002

RESEARCH UPDATE

During the 2001-02 field season, Inventory researchers made 82 visits to 32 locations, adding ten new sites to the Inventory. The weather was terrible throughout the season, as low pressure systems tended to move directly over the Peninsula, rather than tracking to the north, over the Drake Passage. At some sites and with certain penguin colonies, for example, the gentoo penguins at Cuverville Island and Jougla Point, nest counts were down by as much as 90%. Blue-eyed shag populations continued to decline. In late season, from mid-February onward, there was a large influx of fur seals onto Peninsula beaches.

The Inventory remains the *only* research project regularly collecting relevant biological and physical data and information at a wide range of Peninsula locations. The project continues to make repetitive visits to all sites that are species diverse and sensitive to potential environmental impacts. In eight seasons from November 1994 through March 2002, the Inventory now has made 426 visits to 76 Peninsula locations.

As noted in last year's Annual Report, the Inventory's season-to-season data collection helps assess and monitor possible changes in Peninsula faunal populations and floral communities. Because data are collected pursuant to standard methods used throughout the Antarctic, they are fully comparable to data collected by other researchers and help provide a better understanding of the complex Peninsula ecosystem. These comparisons potentially assist analyses of whether any detected changes are Peninsula-wide trends or, rather, aberrations confined to one or, perhaps, a few locations.

THE 2002-03 FIELD SEASON

The Inventory's 2002-03 field season begins in late November 2002 and extends through early March 2003. Primary field research will be conducted from the *Endeavour*, the expedition ship operated by Lindblad Expeditions. Additional, aerial photodocumentation by the UK ice patrol vessel, *HMS Endurance*, involving key Inventory study sites, has been requested.

Experienced Inventory researchers working in the forthcoming season include: Ron Naveen, Steven Forrest, Rosemary Dagit, Richard Polatty, and Megan McOsker. Also, Matt Becker, who's previously worked with the long-term penguin study in Admiralty Bay, King George Island, will join the Inventory this season.

Regular data collection is expected to continue at many sites that are heavily visited and which, previously, have been identified as species diverse or,

potentially, most sensitive to environmental disruptions.

In addition, researchers will concentrate on assessing a few, select sites (e.g. Paulet Island, Petermann Island), which the Inventory hopes and intends to establish as full scale, long-term monitoring venues in future seasons.

THE 25th ANTARCTIC TREATY CONSULTATIVE MEETING

The September 2002 Antarctic Treaty meeting in Warsaw, Poland was an important step forward for the Inventory. As has been standard practice, the UK and US governments submitted an Information Paper describing Inventory results and achievements since 1994. The Inventory received much favorable comment and attention, in public session after this paper was introduced and in the Final Report of the meeting.

The issue of Antarctic tourism swirls anew. France proposed a tourism annex to the Antarctic Environmental Protocol, but this wasn't supported, with a number of Parties stating that the Protocol already contains sufficient mechanisms to regulate tourism, if necessary. Germany suggested that, at the next Consultative Meeting, in June 2003 in Madrid, it would submit a paper proposing that Hannah Point be designated as an Antarctic Specially Protected Area. This site is one of three the Inventory has identified as exhibiting both *high* species diversity and *high* sensitivity to potential environmental disruptions.

Work on formally establishing the Antarctic Treaty Secretariat in Buenos Aires continued, but did not conclude. Discussions will continue at the June 2003 meeting in Madrid.

It was noted that Annex V of the Antarctic Environmental Protocol, which contains various mechanisms and procedures for site protection and management, now has been ratified by all Parties and has entered into legal force and effect.

The Czech government announced plans to place a research station at Brandy Bay, on James Ross Island. This involves a change of venue, away from Turret Point on King George Island, which is another of the three *high* species diversity, *high* sensitivity sites the Inventory has identified.

REVISION TO THE OCEANITES SITE COM - PENDIUM

The US Environmental Protection Agency has commissioned Oceanites to prepare a second edition of

its *Compendium of Antarctic Peninsula Visitor Sites*. The *Compendium* was published in 1997 as a report to the US and UK governments, which have been long-standing supporters of the Inventory.

The goal was to begin making available pertinent data, site-descriptive information, maps, and photodocumentation to assist governments, diplomats, and scientists in evaluating potential environmental impacts in the Peninsula. Such data and information also would enable tour operators, expedition staff, and expedition passengers to minimize, or avoid altogether, any possible disruption to resident fauna and flora.

The first edition of the *Compendium* described 51 sites and proved extraordinarily useful to this wide and varied cohort of Antarctic interests. It also analyzed data regarding the frequency and distribution of Peninsula zodiac landings and visits.

The revision, expanded to cover all 76 sites the Inventory has visited in its eight field seasons, is expected to be available in 2003.

ANTARCTIC NEWS - A DIMINISHED OZONE HOLE

New satellite observations indicate that the ozone hole which developed over Antarctica in the mid-1980's has split into two portions and shrunk considerably since last year, the smallest the hole has been since 1988. The hole usually forms in September and October and, to be precise, is an area of low ozone concentration caused by chlorofluorocarbons and other synthetic compounds that destroy atmospheric ozone. This year it covered six million square miles, down from an average of nine million square miles over the last six years.

This may be temporary, however, a result of warm temperatures along the vortex of high-altitude winds swirling at the South Pole. This September, stratospheric turbulence split the ozone gap into two lobes, which hasn't occurred since satellite observations began in the 1970's. Over time, with long-lived ozone-destroying chemicals now banned under the Montreal Protocol of 1987, it is hoped that the hole will shrink further and disappear altogether by the mid-21st Century.

UNFUNDED NEEDS — WEBSITE, SITE GUIDE, LONG-TERM MONITORING

Oceanites has received support for the Inventory's 2002-03 field season via private foundation grants (The Tinker Foundation, the David and Lucille Packard Foundation), partner organizations (Environmental Defense), and private contributions (Lindblad Expeditions and guests on previous Lindblad

Expeditions Antarctic trips). However, some needs remain unfunded — three, in particular, which take the Inventory onward and upward to a greater level of accomplishment:

1. Website. In terms of disseminating biological data and conservation information to the international Antarctic community, Oceanites intends to produce the most comprehensive, possible website regarding the Antarctic Peninsula, its resident fauna and flora, and "pointers" for visitors to follow, thus assisting this region's long-term conservation.

2. Site Guide to the Antarctic Peninsula. This handy, pocket-sized guide is out of print. The book contained descriptions, maps, and photographs of key Peninsula visitor locations, and was used by expedition staff and, particularly, their guests to ensure that penguins, seabirds, moss, and lichens weren't disturbed or trampled. A second edition is planned, helping instill in all Antarctic visitors a "Have No Impact, Leave Only Footsteps" philosophy.

3. Long-term monitoring of select sites. As suggested above, the Inventory intends in future seasons to undertake full scale, long-term monitoring at select sites. It is hoped that this will help unravel questions and rising concerns about the Peninsula's temperature increase over the last five decades, significantly declining blue-eyed shag populations, changes in the status of fish and krill stocks, and the stability of southern giant petrel populations.

If you or your family's foundation would like to adopt one of these initiatives — and make a definitive, long-term contribution to Antarctica, please contact Oceanites as soon as possible.

DONATIONS, CONTACT NUMBERS

Oceanites is a tax-exempt §501(c)(3) organization under US tax law, and contributions and donations by US citizens are fully tax-deductible.

We would value your support for ongoing data collection, or for our website, *Site Guide*, and long-term monitoring initiatives.

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Southern giant petrel (*Macronectes giganteus*)
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